

AMENDMENTS TO THE CLAIMS:

This listing of the claims will replace all prior versions, and listings, of claims in the present application.

Listing of the Claims:

Claims 1-11 (Canceled).

12. (Currently Amended) An apparatus for improving a visibility in a motor vehicle, comprising:

at least one infrared-sensitive image sensor system for acquiring an optical signal from a surrounding environment of the motor vehicle;

at least one signaling arrangement for producing an item of driver information; and

at least one processing unit for controlling the at least one signaling arrangement as a function of the acquired optical signal, wherein:

the at least one processing unit includes an arrangement for recognizing a course of a roadway from at least the optical signal, and for controlling the at least one signaling arrangement for producing the item of driver information as a function of the recognized course of the roadway; and

the at least one processing unit includes an arrangement for recognizing at least one object, from at least the optical signal, and for controlling the at least one signaling arrangement as a function of a position of the at least one recognized object in relation to the course of the roadway.

13. (Canceled).

14. (Currently Amended) The apparatus as recited in Claim ~~[[13]]~~ 12, wherein:

the at least one object includes at least one of at least one other motor vehicle and at least one pedestrian.

15. (Previously Presented) The apparatus as recited in Claim 12, wherein:

the at least one processing unit includes an arrangement for controlling the at least one signaling arrangement as a function of at least one of a dangerousness of a driving situation and of a visibility condition.

16. (Currently Amended) The apparatus as recited in Claim ~~[[13]]~~ 12, further comprising:

at least one sensor including at least one of at least one radar sensor, at least one ultrasonic sensor, and at least one LIDAR distance sensor, wherein:

the at least one processing unit includes an arrangement for carrying out at least one of the recognition of the course of the roadway and the recognition of the at least one object as a function of a signal of the at least one additional sensor.

17. (Previously Presented) The apparatus as recited in Claim 12, wherein:

the item of driver information represents at least one object including at least one of at least one other motor vehicle, at least one pedestrian, and the course of the roadway.

18. (Previously Presented) The apparatus as recited in Claim 12, wherein:

the item of driver information includes at least one of at least one light pulse, at least one warning symbol, at least one image marking, at least one segment of an image, at least one acoustic signal, and at least one haptic signal.

19. (Previously Presented) The apparatus as recited in Claim 12, further comprising:

at least one infrared radiation source for illuminating at least a part of the surrounding environment, acquired by the at least one infrared-sensitive image sensor system, of the motor vehicle.

20. (Previously Presented) The apparatus as recited in Claim 12, wherein:

the at least one signaling arrangement includes one of at least one acoustic signaling arrangement and at least one optical signaling arrangement corresponding to at least one of at least one head-up display, at least one display screen, and at least one haptic signaling arrangement.

21. (Currently Amended) A method for improving a visibility in a motor vehicle, comprising:

acquiring, by at least one infrared-sensitive image sensor system, an optical signal from a surrounding environment of the motor vehicle;

controlling, by at least one processing unit, at least one signaling arrangement in order to produce an item of driver information as a function of the acquired optical signal, wherein the item of driver information is produced as a function of a position of at least one object in relation to the course of the roadway and the at least one object is recognized from at least the optical signal; and

recognizing, by the at least one processing unit, a course of a roadway from at least the optical signal, wherein the item of driver information is produced as a function of the recognized course of the roadway.

22. (Currently Amended) The method as recited in Claim 21, wherein at least one of:

~~the item of driver information is produced as a function of a position of at least one object in relation to the course of the roadway and the at least one object is recognized from at least the optical signal,~~

the item of driver information is produced as a function of a dangerousness of a driving situation,

the item of driver information is produced as a function of a visibility condition,

the item of driver information is produced as a function of a signal of at least one sensor including at least one of at least one radar sensor, at least one ultrasonic sensor, and at least one LIDAR distance sensor,

the item of driver information is suitable for representing at least one of at least one object and the course of the roadway, and

the item of driver information includes at least one of at least one light pulse, at least one warning symbol, at least one image marking, at least one segment of an image, at least one acoustic signal, and at least one haptic signal.

23. (Previously Presented) The method as recited in Claim 22, wherein:

the at least one object includes at least one of at least one other motor vehicle and at least one pedestrian.

24. (Previously Presented) The method as recited in Claim 22, wherein:

the method is executed via a computer program encoded on a computer-readable medium.

25. (New) An apparatus for improving the visibility in a host motor vehicle, comprising:
- at least one infrared-sensitive image sensor system for acquiring optical signals from a surrounding environment of the motor vehicle;
 - at least one signaling arrangement for producing an item of driver information; and
 - at least one processing unit for controlling the at least one signaling arrangement as a function of the acquired optical signals;
- wherein the at least one processing unit includes an arrangement for recognizing at least one object from at least the optical signals;
- wherein the at least one processing unit includes an arrangement for recognizing a course of a roadway from at least the optical signals, wherein objects defining one of a roadway or a traffic lane are ascertained from the optical signals, and wherein the course of a roadway is ascertained from the position of the ascertained objects;
- wherein the at least one processing unit includes an arrangement for controlling the at least one signaling arrangement for producing the item of driver information as a function of the recognized course of the roadway and as a function of a position of the at least one recognized object in relation to the course of the roadway, whereby the at least one signaling arrangement is controlled as a function of a dangerousness of a driving situation, and wherein the driving situation is determined to be dangerous when a pedestrian behind an oncoming motor vehicle crosses the traffic lane and a danger of a collision between the host motor vehicle and the pedestrian exists.

26. (New) The apparatus as recited in claim 25, further comprising:
- at least one sensor including at least one of at least one radar sensor, at least one ultrasonic sensor, and at least one LIDAR distance sensor, wherein:
- the at least one processing unit includes an arrangement for carrying out at least one of the recognition of the course of the roadway and the recognition of the at least one object as a function of signals of the at least one sensor.

27. (New) The apparatus as recited in claim 25, wherein:

the item of driver information represents at least one object including at least one of another motor vehicle, at least one pedestrian, and the course of the roadway.

28. (New) The apparatus as recited in claim 25, wherein:

the item of driver information includes at least one of at least one light pulse, at least one warning symbol, at least one image marking, at least one segment of an image, at least one acoustic signal, and at least one haptic signal.

29. (New) The apparatus as recited in claim 25, further comprising:

at least one infrared radiation source for illuminating at least a part of the surrounding environment, acquired by the at least one infrared-sensitive image sensor system, of the motor vehicle.

30. (New) The apparatus as recited in claim 25, wherein:

the at least one signaling arrangement includes one of at least one acoustic signaling arrangement and at least one optical signaling arrangement corresponding to at least one of at least one head-up display, at least one display screen, and at least one haptic signaling arrangement.

31. (New) A method for improving the visibility in a host motor vehicle, comprising:

acquiring optical signals from a surrounding environment of the motor vehicle using at least one infrared-sensitive image sensor system;

providing at least one signaling arrangement for producing an item of driver information; and

providing at least one processing unit for controlling the at least one signaling arrangement as a function of the acquired optical signals;

wherein the at least one processing unit includes an arrangement for recognizing at least one object from at least the optical signals;

wherein the at least one processing unit includes an arrangement for recognizing a course of a roadway from at least the optical signals, wherein objects defining one of a roadway or a traffic lane are ascertained from the optical signals, and wherein the course of a roadway is ascertained from the position of the ascertained objects;

wherein the at least one processing unit includes an arrangement for controlling the at least one signaling arrangement for producing the item of driver information as a function of the recognized course of the roadway and as a function of a position of the at least one recognized object in relation to the course of the roadway, whereby the at least one signaling arrangement is controlled as a function of a dangerousness of a driving situation, and wherein the driving situation is determined to be dangerous when a pedestrian behind an oncoming motor vehicle crosses the traffic lane and a danger of a collision between the host motor vehicle and the pedestrian exists.

32. (New) The method as recited in claim 31, wherein at least one of:

the item of driver information is produced as a function of a visibility condition;

the items of driver information is produced as a function of a signal of at least one additional sensor including at least one of a radar sensor, an ultrasonic sensor, and a LIDAR distance sensor;

the item of driver information represents at least one object including at least one of at least one other motor vehicle, at least one pedestrian, and the course of the roadway; and

the item of driver information includes at least one of at least one light pulse, at least one warning symbol, at least one image marking, at least one segment of an image, at least one acoustic signal, and at least one haptic signal.

33. (New) A computer-readable storage medium storing a computer program having a plurality of program codes configured to control, when executed on a computer, a method for improving the visibility in a host motor vehicle, the method comprising:

acquiring optical signals from a surrounding environment of the motor vehicle using at least one infrared-sensitive image sensor system;

providing at least one signaling arrangement for producing an item of driver information; and

providing at least one processing unit for controlling the at least one signaling arrangement as a function of the acquired optical signals;

wherein the at least one processing unit includes an arrangement for recognizing at least one object from at least the optical signals;

wherein the at least one processing unit includes an arrangement for recognizing a course of a roadway from at least the optical signals, wherein objects defining one of a

roadway or a traffic lane are ascertained from the optical signals, and wherein the course of a roadway is ascertained from the position of the ascertained objects;

wherein the at least one processing unit includes an arrangement for controlling the at least one signaling arrangement for producing the item of driver information as a function of the recognized course of the roadway and as a function of a position of the at least one recognized object in relation to the course of the roadway, whereby the at least one signaling arrangement is controlled as a function of a dangerousness of a driving situation, and wherein the driving situation is determined to be dangerous when a pedestrian behind an oncoming motor vehicle crosses the traffic lane and a danger of a collision between the host motor vehicle and the pedestrian exists.